

MARSHALL STAR

Serving the Marshall Space Flight Center Community

June 9, 2005

NASA Administrator Griffin visits Marshall; tells employees that Center has bright future



Photo by David Higginbotham/ Marshall Center

NASA Administrator Michael Griffin, left, makes a point during the Town Hall meeting as Center Director David King looks on.

By Sanda Martel

N ASA Administrator Michael Griffin visited the Marshall Center Friday, touring facilities and meeting people, and with Center Director David King conducted a Town Hall meeting with a standing room crowd of some 800 civil service and contractor employees at the Activities Center.

Employees gave the Administrator an enthusiastic reception at the Town Hall meeting, and he fielded questions there for a full hour. In response to one question, the Administrator told the audience that Marshall will not have to compete to remain NASA's launch vehicle center. Afterward, in a press conference held before his departure, the Administrator said that "Marshall is one of the centers with the brightest future."

At the Town Hall meeting, the Administra-

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Marshall's Duarte helps return the Shuttle safely to flight

By Rick Smith

A s a mining engineer in Colombia, Alberto Duarte never dreamed he'd someday work for NASA. Today, as a member of the Safety and Engineering Risk Review Panel at the Marshall Center, Duarte is part of a team of NASA engineers responsible for safely returning the Shuttle to space.

"One of our most important tasks is to ensure the hardware and software are ready to support the crew in safe flight and for mission success," Duarte said. "The safety of the mission is our top priority."

Duarte and other NASA representatives are responsible for the review and approval of Space Shuttle main propulsion system safety reports and systems performance analysis, as well as engineering changes as a result of NASA's Return to Flight Program. These reports and analyses provide comprehensive identification, controls and acceptance

See Duarte on Page 4



Alberto Duarte in the Heritage Gallery

Marshall Center engineers honored by AIAA group

By Patricia Dedrick Lloyd

Three Marshall Center team members received awards during the American Institute of Aeronautics and Astronautics Alabama-Mississippi Section Awards Dinner held May 17 at the Holiday Inn, Research Park.

The annual event honors professionals for their work in aeronautics and astronautics. Winners were named in six categories and

each received engraved plaques.



Schmidt

Dr. George R. Schmidt,
manager of NASA's Propulsion
Research Center at Marshall,
received the Holger Toftoy Award
for outstanding aeronautics
and astronautics management.
Schmidt leads the Center's
research and development of
advanced propulsion technologies at the state-of-the-art Propulsion Research Laboratory.

Under Schmidt's quidance, NASA scientists,

engineers, guest researchers and partners from industry and academia seek innovative breakthroughs in propulsion systems to support a broad range of future space missions.

Previously Schmidt served as program executive for Nuclear Power Systems in NASA's Science Mission Directorate in Washington, D.C.

David L. Sparks, team lead for the Combustion Devices Group at Marshall, received the Aerospace Engineer of the Year Award for demonstrating extraordinary technical skill and leadership in the field.

Sparks has performed design analysis for a variety of combustion devices components, including injectors, combustion chambers

and nozzles. He also served as lead engineer for the main injector developed for the X-34 flight vehicle's liquid oxygen and kerosene 60K main engine and actively participated in the development of

the program's ablative combustion chamber assembly.

Dr. Christopher S. Protz, a liquid propulsion systems engineer at Marshall, received the Young Aerospace Engineer of the Year Award from AIAA awarded to a person 35 years old or younger who has demonstrated extraordinary technical skill and dedication to the aerospace profession.

Protz joined Marshall in 2004 and

since has made considerable contributions to the Combustion Devices and Injector Technologies program. He also has been involved in the Integrated Powerhead Demonstrator program, including trajectory analysis of a stream into a cross flow of the



Protz

oxidizer preburner, plume characteristics analysis, and duration testing on a new higher-powered exciter system to determine the maximum allowable run time for the igniter.

He also serves as the contracting officer technical representative for Small Business Innovation Research on Microelectromechanical Systems solid rocket engines.

The writer, an ASRI employee, is the Marshall Star editor.

NASA Space Shuttle Processing Status Report

In the Vehicle Assembly Building, orbiter Discovery was demated, or removed, from its External Tank (ET-120) and Solid Rocket Boosters in high bay 1 on June 2. Discovery was lowered by crane onto the Orbiter Transporter System in the VAB transfer aisle.

The vehicle will be moved in front of high bay 3 in preparation for being lifted and attached to its new tank, ET-121, on June 6. That tank was originally scheduled to fly with Atlantis on the second Return to Flight mission, STS-121. A new heater was added to the tank's feedline bellows, part of the pipeline that carries the liquid oxygen to the orbiter's main engines, to minimize the potential for ice and frost buildup.

Once mated to the new tank, technicians will work final closeouts on the fully assembled Space Shuttle stack, and perform liquid oxygen and liquid hydrogen electrical mates and an interface verification test. Discovery is currently scheduled to return to Launch Pad 39B on June 13.



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Griffin -

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tor praised the Marshall Center's expertise in engineering, space transportation, materials research and systems development.

"The things this Center does ensure it is not going away," the Administrator said.

The Administrator said the Marshall Center has a bright future and will play an important role in fulfilling the Agency's Vision for Space Exploration – a bold plan to return humans to the Moon, journey to Mars and beyond. "We need modified launch vehicles for travel to the Moon and Mars, and Marshall does that kind of work," he said.

"It's time to move on," the Administrator stressed, noting that when the Space Shuttle is retired in 2010 NASA must intelligently transition Shuttle knowledge, workforce and assets to other programs. "The best thing we can do is create the next-generation transportation system with a cost lower than the Shuttle. And Marshall will help with that."

He emphasized the importance of developing and sustaining technology for NASA's long-term vision by transitioning existing technology into advanced systems.

Other topics covered by the Administrator included Agency-wide, in-house work versus contract services. He said in some instances competition serves the Agency well, such as for peer-reviewed science and flight missions. Competition should be used judiciously, he added.

"It is not in my interest to let a center go out of business," the Administrator said. He added that he is committed to all centers having a mission.

In the future, he said, he envisions the International Space Station could be supplied commercially.

He said the Agency needs to think more about reaching its goals than about the processes it uses to reach them, identifying the procedures that are not valuable and "kill them off."

Asked what he hopes to accomplish during his tenure as leader of the Agency, the Administrator listed several priorities: returning the Shuttle to safe flight and completing an unspecified number of missions; developing the Shuttle replacement vehicle; completing the International Space Station and fulfilling obligations to international partners; and developing a lunar architecture flight plan and crew exploration vehicle, which, he noted, should be judged by its ability to transition into a Mars plan.

Administrator Griffin, who served as NASA's Chief Engineer and associate administrator for exploration earlier in his career, takes the helm of the Agency as it is charting a new course. The Shuttle is poised to Return to Flight during the launch window



Photo by David Higginbotham/ Marshall Center

Roy Priest asks a question during the Town Hall meeting with NASA Administrator Michael Griffin and Marshall Director David King.

of July 13-31, and represents the first step in fulfilling the Vision for Space Exploration.

Administrator Griffin was nominated to head the Agency by President George W. Bush on March 14, and confirmed by the U.S. Senate on April 13. At his confirmation hearing April 12, he made clear that the "strategic vision for the U.S. manned space program is of exploration beyond low Earth orbit."

Prior to his appointment, he was Space Department Head at Johns Hopkins University Applied Physics Laboratory in Laurel, Md. Previously, he was president and chief

operating officer of In-Q-Tel, Inc. of Arlington, Va. He also served in several positions within Orbital Sciences Corporation, including chief executive officer of Magellan Systems, Inc., of Richmond, Va.

The Administrator also worked at NASA's Jet Propulsion Laboratory in Pasadena, Calif., and served as Deputy for Technology at the Strategic Defense Initiative Organization in Washington.

He received a bachelor's degree in physics from Johns Hopkins University; a master's degree in aerospace science from Catholic University of America in Washington; a doctorate in aerospace engineering from the University of Maryland in College Park, Md.; a master's degree in electrical engineering from the University of Southern California in Los Angeles; a master's degree in applied physics from Johns Hopkins University; a master's degree in business administration from Loyola College in Baltimore, Md., and a master's degree in civil engineering from George Washington University in Washington.

This was his first visit to the Marshall Center since he became the Agency's 11th Administrator. But he noted during the Town Hall meeting that he is no stranger to the Center and its capabilities, having visited numerous times since 1977.

The writer, an ASRI employee, supports the Public and Employee Communications Office.

Management group to meet

The Project Management Institute will meet June 21 from 11:30 a.m. to 1 p.m., at the Botanical Gardens' Murray Hall, 4747 Bob Wallace Ave.

Richard Grimes, president of Outsource Training.biz, will speak on Project Manager Negotiations. The presentation offers a greater understanding of workforce development, employee performance, leadership, and organizational evolution. Cost is \$20. Make reservations by June 17 to www.NorthAlabamaPMI.org.

Duarte

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rationale of the functions and performance of the Shuttle main propulsion system and component parts, basically the nuts and bolts of the system.

A native of Bogota, Colombia, Duarte graduated from the National University of Colombia in Bogota in 1975 with a bachelor's degree in chemical engineering. After working for several years in Colombia, Duarte set his sights on the United States.

In 1981, he took a position in the Systems Safety Office at Martin Marietta Aerospace in New Orleans, where he was introduced to the Space Shuttle and the world of space exploration. He was a lead engineer at the Mission Assembly Facility, working on the design, fabrication and testing of the External Tank for the Space Shuttle.

In 1986, Duarte's newfound love of space, and of his adopted country, led him to become a U.S. citizen. A year later, he moved to Huntsville to work as a lead engineer for the Systems Safety, Reliability and Quality Engineering Office of Boeing Aerospace. As part of the Shuttle support

contract, his job entailed systems component analysis for the Solid Rocket Booster and Space Shuttle Main Engine projects.

In 1988, Duarte joined NASA as a lead systems safety engineer for the Space Shuttle Main Engine in the Safety and Mission Assurance Office at the Marshall Center. Throughout his NASA career, Duarte has held numerous managerial and leadership positions, including manager of the Systems Safety, Reliability and Quality Engineering Office for the advanced solid rocket motor in Iuka, Miss.

He served as advanced development program manager for the Space Transportation Main Engine Program Office from 1992 to 1994, and as propulsion chief engineer for the X-33 flight demonstrator project from 1994 to 1999. He returned to the Space Transportation Directorate at Marshall in January 2000, serving as a special assistant to the director. In 2003, he was named manager of the Integration Office in the Space Transportation Directorate, providing management and operational support across the organization.

Duarte earned a master's degree in chemical engineering in 1994 from Tulane University in News Orleans. In 2003, he received a master's degree in systems engineering and engineering management from the University of Alabama in Huntsville.

He enjoys volunteering through his church for several local and overseas mission tasks. He also volunteers as a translator for Huntsville Hospital and for Huntsville Municipal Court. He also teaches free Spanish lessons to anyone who wants to learn the language. He enjoys writing about his personal experiences in America, sending some of his articles to El Tiempo, the leading newspaper in Bogota, reaching 285,000 readers. "What I see and experience with my family here in the United States, I enjoy sharing with others," Duarte said.

Duarte is focused on making sure NASA achieves its goals. "What we do today sets the foundation for the future of space exploration," he said. "We're paving the way for those generations of explorers to come and inspiring them to move forward with the Vision for Space Exploration."

2005 Marshall Honor Awards Ceremony recognizes team members



Photo by Emmett Given/ Marshall Center

Marshall Center Director David King, right, receives the Presidential Rank Award from James L. Jennings, NASA associate deputy administrator for Institutions and Management. Jennings spoke during the Marshall Honor Awards Ceremony held June 1.



Photo by David Higginbotham/ Marshall Center

The Darrell Gaddy family enjoys refreshments and socializing during the afternoon reception following the Marshall Honor Awards Ceremony.

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Obituaries

Dewey Bowes Channell, 66, of Decatur, died April 23. Mr. Channell retired from the Marshall Center in 1994 after working as a supervising aerospace engineer.

He had also served as a member of the Decatur Planning Commission.

Survivors include his wife, Sylvia Kay Channell; two sons, Rob Channell and Tom Channell, both of Madison; a daughter, Cynthia Channell-Butcher of Notasulga; and a sister, Martha Channell Francis of Decatur.

Philip C. Cothran, 79, of Huntsville, died March 26. Mr. Cothran retired from the Marshall Center in 1985 after working as a financial program specialist.

He was also a World War II veteran. Survivors include his wife, Clyde Maye Cothran; and a son, Paul Cothran of Huntsville.

Charles A. Hawkins Sr., 83, of Huntsville, died May 1. Mr. Hawkins retired from the Marshall Center in 1981 after working as an aerospace engineering technician.

He was also a World War II and Korean War

veteran.

Survivors include his son, Charles A. Hawkins Jr. of Oxford; and two daughters, Rebecca Gladden of Huntsville and Nancy Rush of Owens Cross Roads.

Robert J. Lessels Jr., 60, of Madison, died April 9. Mr. Lessels retired from the Marshall Center in 1998 after working as a technical publications writer and editor. He also was a speechwriter in the Public Affairs Office and was a frequent contributor to the Marshall Star

Survivors include a son, Rob Lessels of Maryland.

Eloitte W. Roberts, 88, of Hartselle, died March 28. Mr. Roberts retired from the Marshall Center in 1976 after working as a crane operator.

He was also a World War II veteran. Survivors include his sons, B.C. "Sonny" Roberts of Portland, Ore., and the Rev. Dr. Jim Roberts of Huntsville; and a daughter, Bonnie Teichmiller of Hartselle. James T. Shepherd, 82, of Huntsville, died March 29. Mr. Shepherd retired from the Marshall Center in 1979 after working as director of Institutional and Program Support.

He was also a World War II veteran. Survivors include his wife, Margaret G. Shepherd; a son, James Thomas Shepherd Jr. of Huntsville and a daughter, Barbara Spilman of Memphis.

Marvin W. Vines, 78, of Arab, died March 30. Mr. Vines retired from the Marshall Center in 1974 after working as an aerospace engineering technician.

Survivors include his wife, Ruby N. Vines.

Jerry Junior Wright, 64, of Lynchburg, Tenn., died April 11. Mr. Wright retired from the Marshall Center in 1994 after working as an optical physicist.

Survivors include his wife, Elizabeth Joann Wright; two daughters, Maria Cowart of Huntsville and Mary Wen Carroll of Dothan; a son, Jerry Len Wright of New Market; a sister, Glady Coggins of Tallapoosa, Ga.; and a brother, Marion Wright of Buchanan, Ga.

Marshall will be 'eyeing' next flight with new imaging equipment

By Lynnette Madison

hen Space Shuttle Discovery returns when space shaces to flight there will be more "eyes" watching its liftoff and climb to orbit than those of the spectators crowding Kennedy Space Center and Cape Canaveral. Scientists and engineers at the Marshall Center's Photographic Image Analysis Facility, housed in Building 4203 and one of NASA's most capable in-depth imagery review, analysis, and reporting laboratories, will be "eyeing" the launch from more cameras using more computers and better software than ever before. At right, Tom Rieckhoff, team lead for Marshall's Engineering Photographic Analysis, demonstrates the latest high-tech imagery review and analysis equipment installed at the Center to Terri Murphy, standing, and Christine Boykin, both of Johnson Space

Center. Murphy and Boykin are part of the Space Shuttle Systems Engineering and Integration Office, a clearinghouse responsible for integrating and communicating technical issues for the Shuttle's multiple elements. They visited Marshall to gain a better understanding of how the Photographic Analysis Lab works and see the new Marshall systems that will give the Space Shuttle Program a better understanding of the Shuttle performance and environment during liftoff and ascent.

The writer, an ASRI employee, supports the Public and Employee Communications Office.



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Classified Ads

Miscellaneous

Rattan wicker pedestal square rounded-corner glass top table w/4 chairs, blush, make offer. 772-7262

1998 Mustang 16x7 alloy rims, 5-4.5" lug pattern, complete set \$100. 721-3945

Hooker solid Cherry 4-poster bed, queen size, carved posts, broken pediment headboard, \$575. 325-8958

Sunbeam gas grill, two full tanks gas included, \$60; General Electric tv, 19", \$30. 895-9520/Philip

Leather Alabama jacket, 3T, \$75. 655-2939

Cook's Essentials Fondue pot or chocolate treat maker, many accessories, used once, \$13. 325-5866

Maytag gas dryer, \$85. 509-7907

New Fedder's 18,000 BTU a/c, remote control, \$275. 931-363-8217

Kimball console style piano & bench, Fruitwood finish, recently tuned, \$800. 256-880-6146

Yorkie pup, CKC, female, 2.5 lbs., 12-weeks old, black/ brown, lst vet visit, \$1,000. 653-9518

Pennsylvania House video cabinet, Cherry, up to 30" tv, vcr/dvd, \$750. 931-427-2059

Daybed, pop-up trundle w/o mattress, \$50. 881-0551

Savage Model 110 30-06 bolt action rifle w/40mm Burris 3x-9x scope, \$350. 771-7799

Flying King RC airplane, 6-channel Futaba radio, K&B 65 engine, \$300. 828-4564

Brass white rattan hanging lamp, \$25. 883-2948

Barbie bicycle w/training wheels, pads, and helmet, \$20. 722-2190

Welder Pro 9940 Home Gym, delivery and set-up assistance included, \$200. 256-536-3390

Diamond solitaire ring, \$75; diamond cluster heart-shaped ring, \$100. 683-1279

Compound bows: Browning Mirage, \$100; Browning Ballistic, \$125; Martin Firecat, \$125; XI Impulse, \$100. 931-425-0205

Power Wheels SunJammer jeep, \$50; Power Wheels Harley Davidson motorcycle, pink & purple, \$50. 214-0110

Image 10.8Q1 space saver treadmill w/2.5hp continuous duty motor, heart rate monitor. 656-9201

HP all-in-one printer: scan, copy, print, \$25; two plots Huntsville Memory gardens, \$2000. 256-881-4067

Pair jack stands, \$5; pair ramps, \$5; crawler, \$5. 881-7953

Pride electric lift & recliner chair, \$250; Love seat, \$100; Microwave oven, \$10, 534-7913

Parting out MTD Model 820/849, 46" mowing deck, 3 blades, \$75; other parts cheaper. 882-0461

Tires, 265/70R16, all season, \$150. 256-394-2588

Australian Shepherd puppies, purebred, 1st shots, wormed, vet checked, \$75. 256-561-2287

Nordictrac, \$50; Boy's M/L Gap shirts, \$5/each; Phonics Game, \$25; Antique chairs, \$50 each. 880-7106

Vehicles

2002 Kawasaki Vulcan Drifter 800 motorcycle, 12k miles, under warranty, \$6,200. 468-0686

Kawasaki Mojave 4-wheeler, 250cc, kick-start w/reverse, one-owner, \$2,000. 256-586-7013

1996 Chevy S-10 extended cab, red, v6/4.3L Vortec engine, Euro taillights, 110k miles, \$5,000. 509-6177

1998 BMW 740IL, hunter green/tan leather interior, 103k miles, new tires, \$16,000. 682-0888

Scooter, red, key-start, lights, horn, turn signal, never used, \$200. 776-9165

1977 Procraft Fish-n-Ski, 115 Mercury, \$2,500. 714-3769

1998 BMW 540i, 66k miles, leather, sunroof, all-power, loaded, \$19,500. 882-7350

2001 Dodge Ram 1500, ext. cab, auto, pw/pdl/cd, blue, camper shell, 69k miles, \$12,900. 682-1350

2003 Nissan Pathfinder, v6, auto, 2wd, tow package, 4-door, 24k miles, cd, silver/charcoal leather, \$23,000. 880-3337

1994 Mazda 626 ES, leather, cd, moonroof, \$2,400. 837-6352 1996 Honda XR100 dirtbike, \$999. 655-6293

2000 Chevrolet S10 ZR2, 4x4, extended cab, cd/cassette, automatic, red, loaded, 6-cyl., \$10,500. 256-593-7207

1989 KDX 200, \$950 firm; riding mower, needs carburetor work, 18hp, \$300. 348-4899

1985 Jimmy (small SUV), 57k actual miles, great gas mileage, \$3,500. 837-1774

1999 Chrysler Sebring Coupe LXi, automatic, leather, sunroof, 90k miles, \$6,000. 256-890-2120

1999 BMW 328iC, white, gray leather, power top, premium, sport & H-K, 85k miles, \$18,500. 837-1035

2000 Saturn SL1, 45k miles, 4-cyl., auto, 4-door, \$5,450. 256-753-2278

1973 Corvette 350 CID, auto, air, T-tops, matching numbers, white w/black leather interior, \$12,000. 964-5312

Wanted

Baby swing & play yard, green/beige color, good condition, 256-498-2028

iPod in good working order. 883-2757

Couch & loveseat or couch & recliner for game room; two dressers, black, 508-0509

Free

Five kittens, 8 weeks; 3 kittens 9 months; 2 adult cats. 461-4697

Old Chicago brick. 539-3166

Kittens. 828-3181

Found

Several pairs of glasses. Call 544-3623 to claim/identify Men's ring at Marshall Institute. Call 544-7212 to identify/claim

In Bldg. 4700 area parking lot, un-cashed check. Call 544-9526 to claim/identify

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